## August 4, 2005

Ms. Mary L. Cottrell Secretary Dept. of Telecommunications & Energy One South Station Boston, MA 02110

Re: Docket No. DTE 04-116 - Investigation into Quality of Service Provided by LDC's

Dear Ms. Cottrell:

This letter provides the response to requests for the information listed below.

With this filing, the Company has completed responding to all of the interrogatories requested by Staff >(and intervenors) during this proceeding.

Response to DTE-05 Interrogatories dated 07/15/2005 DTE-LDC - 001

Very truly yours,

Stephen Klionsky Senior Counsel Western Massachusetts Electric Company

SK/yv

cc: Service List

## Western Massachusetts Electric Company Docket No. DTE 04-116

Information Request DTE-05 Dated: 07/15/2005 Q-DTE-LDC-001 Page 1 of 3

Witness: Michael T. Smith

**Request from: Department of Telecommunications and Energy** 

## Question:

Please refer to the alternative formula below for the Problem Circuit Remediation Index ("PCRI").

(8760-Circuit SAIDI) / 8760

Comment on the advantages and disadvantages of employing this formula over the previous formula as expressed in Attachment A of DTE-LDC 4-1 through DTE-LDC 4-6.

## Response:

As discussed in WMECO's answers to Information Request DTE-03, Q-DTE-LDC-003 previously filed with the department on June 9, 2005, and Information Request DTE-04, Q-DTE-LDC-002, filed on July 1, 2005, WMECO continues to support the use of system-wide reliability measures of SAIDI, SAIFI, and CAIDI instead of individual circuit level measures. Please refer to WMECO's answers to those questions for discussion of the advantages and disadvantages of utilizing such a method of determining reliability at the individual circuit level.

WMECO has performed analysis for the third definition of the PCRI metric based on the following formula for the Years 2001-2004:

(8760-Circuit SAIDI) / 8760

The formula above takes the number of hours in a year (8760) and subtracts the System Average Interruption Duration Index (SAIDI), in minutes. The result is then divided by the number of hours in the year. This metric will always result in a number less than one and has the overall effect of reducing the large variability of the SAIDI value. Attached below, as Appendix A, is a graph of Circuit SAIDI values versus calculated PCRI. From the graph, it can be seen that circuits with high SAIDI values have the lowest PCRI values. WMECO does not believe that this use of the new formula for PCRI would accomplish identifying poor performing pockets.

The following is WMECO's analysis of what the use of the new PCRI formula would have meant for WMECO for the Years 2001-2004:

Year	2001	2002	2003	2004
Worst 10 Circuit PCRI	0.933	0.907	0.876	0.931
Remaining Circuits PCRI	0.990	0.986	0.985	0.988
Std Dev of Remaining Circuits	0.014	0.013	0.017	0.011
Target for PCRI Penalty	1.004	0.999	1.002	0.999
Penalty Indicator	No Penalty	No Penalty	No Penalty	No Penalty
Penalty CKT Saidi	-32.863	1.550	-12.186	2.678

From the table above, WMECO would not have exceeded the penalty target and would not have been accessed a penalty for this metric in any of the years analyzed. From its analysis, WMECO believes this metric would never result in penalties for any company.

From the results of the values that the metric produces, worst performing SAIDI circuits have lower PCRI values, and when you take the average value of the remaining circuits and add one standard deviation, you get a number that is closer to or greater than one, which is indicative of better performing circuits or circuits where the SAIDI has to be negative, which is impossible. From this, it becomes evident that the metric will never result in penalties because the worst performing circuit PCRI value will always be less than the target PCRI value because the formula sets target values in the wrong direction.

WMECO does not support the use of this proposed PCRI metric. As well, it does not appear that use of this metric would guide the company in determining where capital investments should be made in order to improve system reliability.

Appendix A WMECO SAIDI vs. PCRI for 2001-2004

